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dele, and the Tain-Daware. They then reappear on the river Waria, to the north of the last-mentioned tribes. Their distribution excludes in the main that of the small dramas for which the Orokaiva are famous, these latter belonging especially to the Aiga, Binandele, and Tain-Daware.[1] Thus bull-roarer and flute on the one hand, and drama on the other tend to be mutually exclusive. It is noteworthy that the miniature drum, *saunda*, is confined to those three tribes who practice the drama.

Another significant distribution may be mentioned, viz. that of the yam. This vegetable is grown over the whole of the plain, but far less commonly in the north than the south, though it is not, as far as I know, debarred by climatic causes from flourishing in any part. But the yam-house and the extensive cultivation of yams disappear north of Divina Kovari, so that their distribution seems to correspond in some degree with that of the bull-roarer and the sacred flute.

Save for these few distinctions between South and North, the exclusive presence of bull-roarer, flute, and yam in the one, and of the drama and the *saunda* in the other, I have not been able to see any really important distinctions between the various component tribes of the Orokaiva. It may be stated with some confidence that the groundwork of their customs and institutions is the same throughout.

It is on the assumption of general uniformity among the tribes that the present report claims to refer to the people as a whole. The tribe with which I am best acquainted is that of the Aiga, who seemed to offer the best opportunities for research because they are fairly central and as yet less contaminated by European influence than most of the others. Out of a total Orokaiva population of some 9,000, this tribe numbers approximately 1,300, who are scattered in nearly fifty villages on or between the Opi and Kumusi rivers. To avoid confusion it will be the rule of this report to use the Aiga dialectal form for native words.

[1] I am not ready to say that the drama never appears among the Southern tribes. At any rate I cannot speak with any certainty about the Hunjara.

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From the account of the origin of the cult it will be seen that the prophet believed himself possessed by the spirit of the actual taro plant. When once the cult was set moving many others besides Buninia began to receive visitations, and informants who lived in his neighbourhood, i.e. near the Mambare mouth, expressly stated that the visitations were from spirits (*atiti*) of the taro (*ba*). This they realized most commonly by means of their dreams. There were spirits of all the multifarious kinds of the taro plant, *Kaiva*, *Porove*, *Kivere*, *Ovivi*, &c., and not only of the taro but of other garden plants as well. It is too much to expect cut-and-dried dogma from natives, and there is confusion and haziness as to the nature and numbers of these plant spirits. There are probably at least a score of varieties of the taro cultivated by the Orokaiva, all of them readily distinguished by differences of leaf, stalk, or bulb. The taro spirits bear the names of these several varieties, but, according to the truly orthodox view propounded in the head-quarters of the cult, there are countless spirits for every variety. They join in disembodied forgatherings at the *Ba nyasi*, or Taro villages, Siri, Waiegi, Kome, and Duero—to name some of them—which are wooded hills along the picturesque coast between Deboi and Ambasi. They throng invisibly at the feasts in the real villages. As I was once talking with the Taro man Yaviripa (a rare opportunist in debate), he informed me that a taro spirit was close by us at the moment. He had met the spirit in a dream last night, and had been apprised of its intention to join the discussion; now a twitching in his shoulder told him that the appointment had been kept.

Except in dreams the taro spirits are invisible. It is noteworthy that in the dreams they always appear in human form. In the visions of Buninia, for instance, the dancers were taro spirits in the guise of young men. Some informants have actually used the expression *Ba embo*, or 'Taro man' (usually signifying the Taro specialist), for the taro spirit. A list was given of the

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that he met the *atiti* of the taro plant: those who have since been infected by the cult dream, or profess to dream, that they meet their ancestors or deceased relatives. But they sometimes employ the new word *atiti* (simply because it is fashionable) instead of the old words *binei*, *sovai*, *embaki*, &c. The later converts grasped the word, but failed to grasp the idea. Buninia's conception of taro spirits seems hardly in keeping with popular belief; consequently it made but little headway. While the practices or ritual of the cult offered peculiar attractions to the masses, the somewhat new-fangled doctrine was unconsciously rejected, or, more accurately, relapsed into the old form.

A few instances may illustrate the close association between the Taro cult and the dead. A Taro man of note is taking the leading part in a garden ceremony, which consists principally in treating the taro with medicines, and which is accompanied by the invariable feasting and singing. In the songs he acts as choragus or *vorsänger*, and the repeated theme of them is 'Father, give me Taro'. He calls on his father, one Sireri, by name to stand by in the bush and witness the dancing and conviviality which is going forward in the village. He describes to me how from time to time he is visited by his dead parent. Lying down to sleep he leaves a plate of taro by his side. Presently Sireri comes and eats a little, as much as a rat might nibble, for instance, and then gives his son a leaf called *Moso* for taro medicine, telling him to leave a fragment in the hole where the taro-top is to be planted. The dreamer does not see his father but hears his voice, and then wakes to find the leaf of *Moso* in his hand.

Another Taro man tells how he acquired his knowledge from his brother-in-law, named Panjari. Panjari had been visited in his sleep by the *sovai* of his father and mother. They had taken him away with them to the *sovai-ta-na*, or 'the ghost village', and there given him taro medicine and pig medicine, with instructions how to use them for

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formed in one of the men's houses, *oro*, which is usually no more than a roofed platform. In the event of a large festival, a *ba oro*, or Taro house, will be constructed for the occasion, and after the feast this structure may remain as in some sort a temple of the Taro. It is frequented (not always exclusively) by the accredited Taro men and their professional visitors; it is the scene of recurring *kasamba*; and in some cases it is the place for food offerings to the spirits. A miniature platform will sometimes be found in the roof gable, with a dish of taro and dried fish, to which the spirits help themselves, betraying their presence, I am told, by faint 'sip sip' noises, like the chirping of the geckos which haunt all native houses. In the *ba oro* a Taro man will sometimes sit alone, belabouring his drum and shaking his rattled spear. This, for reasons which he probably cannot explain, will please the spirits and induce them to prosper the taro.

Besides the very congenial duties of singing and eating, the Taro man has certain more directly useful tasks. These consist especially in the use of his medicines. *Ba sivo*, or magical fertilizers for the taro plant, were known long before the present cult came into being. One can often see in them a kind of logic, that of homoeopathic magic. For instance, there is a certain plant named *Iori babiva* which bears a striking resemblance to the taro, but differs from it in being much larger and rankER. These qualities are just what the gardener requires in his vegetables, so he drops a fragment of *Iori babiva* leaf in the hole before he drops in the taro shoot. This is merely an example: there are medicines without number for taro, sugar-cane, yams, and all the other products of the garden. The Taro men, being in a manner specialists, savants, and horticultural as well as spiritual leaders, make great play with this means of advancing the crops. The pharmacopoeia is an extensive one, and each Taro man will name half a dozen well-known *ba sivo*—common property of all who follow the cult—and probably, if you engage to keep his secret, one or two private medicines

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of his own. The former, about which there is no professional secrecy, are regularly associated with the taro as stock medicines. The most conspicuous is *Tumeni*, the crimson amaranth, which so often adds a touch of gay colour to the garden clearing. Another is the wild thyme *Bayoga*, which is also planted in the garden and which stood, as I learn from Mr. Elder, for the taro of the taro spirits. Other *ba sivo* are used in the manner I have already described for *Iori babiva*, viz. by planting fragments of them together with the taro shoot; and with others again the method of applying or administering the tonic seems almost incomprehensibly indirect. One Taro man possessed (in secret partnership with his *nabori* or brother-in-law) a medicine which must be rubbed upon the sharp-edged oyster shell, in order to impart some vigour to the taro plant as its drooping leaves were pruned off with this implement. A more usual method of administering the medicine is to chew it with betel-nut, and then to spray it from the mouth over the plant.

A scene witnessed in the Aiga country is in many ways typical of the Taro cult, and in it we may see the medicine man at one of his characteristic tasks. A number of guests have assembled in the village of Totemaburari. The night and much of the forenoon have been spent in singing Taro songs, but still the revellers, whose endurance is greater than the jazzer's, show no signs of exhaustion. The principal Taro man, named Home, has been of late visited by his deceased father and has awoken to find a fresh supply of medicines in his hand. He now carries, strung together, a number of tiny packets, each neatly done up in a wrapping of green leaf, and each a very sizable mouthful. Upon close examination the packet proves to contain a somewhat repulsive hotchpotch, or rather salad, of five taro medicines, which have been already chewed with betel, spat out, and wrapped in the tidy, fair-seeming, little parcels to await a second chewing. At about noon Home, supported by two assistants who

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are like himself qualified Taro men, and attended by some twenty boisterous youths, sallies forth to perform the business of the day. This is nothing less than a wholesale medical treatment of the taro. Pushing rapidly through the garden, Home is seen to stoop and spray the medicines from his mouth over the taro leaves. He is continually tearing the husks from betel-nuts, which are necessary both to keep up his spirits and to ensure a suitably liquid medium for the *ba sivo*, and continually plies himself with the little green packets which contain the *ba sivo* itself. Here and there he pauses to break off some of the larger leaves (for the taros are well advanced and almost shoulder high). His two associates are similarly engaged, and meanwhile the chorus of young men, armed with their drums, are following or crowding around. The progress of the party is rapid and almost reckless: in reality the ceremony must conduce rather to the destruction than the growth of the taro, for the young drummers care little where they trample. The heat of the overhead sun is beyond endurance. The thirsty young men tear down bunches of sugar-cane and pounce upon the water-melons, regardless of their owners. One vociferous old woman stands in valiant defence of her melons, and a number of girls run on ahead to pluck their betel-pepper before the all-devouring chorus has reached it. But there is no lack of goodwill and merriment, and when, after almost two hours of this exceedingly strenuous employment, the Taro men return to the village, it is to partake of the feast which concludes almost every native ceremony.

The rationale of this Taro ceremony is no more clear than usual. The five constituents of the medicine in the small packets were, one ventures to say, entirely useless —like the vast majority of native medicines. But for each of them, if we could discover the idea of their inventors, discoverers, or patentees, there is no doubt some frail bond of magical logic which made them obvious and proper medicines for taro. The breaking of the leaves

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was explained by Home in the following way. As the taro approaches maturity the outer leaves should droop and fall. He desired an early ripening of this particular crop, and felt that, by breaking off some of the larger leaves here and there, he would expedite the general falling of leaves which would indicate that the tubers were ready.

Some of the medicines used by the Taro men are apparently meant, not to stimulate the taro itself, but to provoke the shaking-fit or *jipari* in the Taro man. It may perhaps be felt that, by contributing in some way to the power of the latter, they contribute also, though indirectly, to the prosperity of the former. However, a Taro man of Wasida showed me, in strict secrecy, eight *jipari-kore*, or ' shaking medicines ', which were intended primarily to produce in him the condition of *jipari*. They included the amaranth (*Tumeni*) and the flame-coloured coxcomb (*Siroru*), both of them taken in the form of a cold infusion. The first, my informant said, gave him a headache.

Hovere, a wild verbena (?), and *Derega*, a very harmless-looking grass, were taken in a curiously indirect form: their seeds were burnt with lime which was subsequently taken with betel. Considering the method of lime-burning, it seems hardly possible that any effect could be produced on the lime by a few grass seeds; nevertheless, it was claimed that *Hovere* was a strong medicine. Two others, both creepers, were said to affect the legs of the Taro man. It has not been possible to have these various plants analysed, but I venture to think the labour of analysis would be largely wasted. As the number of native medicines is already so great, and as new medicines are constantly being added to the list, and as the reason for their efficacy, where it is understood, turns out to be simply magical, one may venture to say that in the vast majority of cases there is nothing in them. Empirically the native may discover stimulant or poisonous properties in certain plants, but in nine cases out of ten—

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X-794 754 shoulder off the responsibilities on to the spirits. The theory (quite commonly understood) is that the spirit will resent any disrespect or inattention; and that to fail in respect or attention to the Taro man is to offend the spirit itself in the same way; hence the punishment of sickness. If, as one informant said, any one abused a Taro man, the spirit would overhear and enter the body of the abuser. Such, I am told, is the explanation of the queer practice of universal hand-shaking. One must keep on good terms with a Taro man.

10. *Sects of the Taro and Variant Cults*

X-794 795 We have already noticed that in the course of its extension the Taro cult has undergone one very profound change, viz. from a worship of the taro spirit to a worship of the dead. But side by side with this there have been many minor changes corresponding with the multiplicity of new prophets and their inspired idiosyncrasies.[1] Such idiosyncrasies may or may not establish themselves in popular favour. Where they have done so they have given rise to more or less pronounced variants. In the first place, however, we might distinguish between (1) the 'sects' of the Taro, and (2) the variant cults which it is the purpose of this section to describe.

X-794 795 ●244 There are many varieties of the taro plant, each known by its proper name, such as *Kaiva*, *Porovi*, *Ovivi*, *Togoro*, &c. On one occasion I listed as many as seventeen, but the catalogue was still, I believe, incomplete. Now any Taro expert will tell you that he is a *Kaiva* man, or a *Porovi* man, or an *Ovivi* man, &c., as the case may be. The varieties of the taro itself afford the basis for a classification of the Taro men, and for these classes I have employed the word 'sect'. Thus each sect is known by the name of a particular variety of the plant.

X-794 795 In any one village the adherents of Taro will probably belong in the majority to one particular sect. This is

[1] Vide pp. 56–7.

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A more difficult question is the effect of the Taro cult on life and manners. This is naturally somewhat complex. We have seen that the ostensible purpose of the cult is to promote the fertility of the gardens. In reality the rites which are most directly aimed at this result seem on the whole useless, and in one or two cases destructive. However, it is likely that the gardens do receive some benefit from the cult simply by the increased interest with which it has invested them, and that this indirect benefit outweighs many times the small amount of harm done by such a ceremony as that of medicining the taro (pp. 42, 43).

Those who travel in the Northern Division cannot fail to be impressed by the frequency of Taro feasts and functions. It would be wrong, however, to regard these as mere waste of time, as if the cult were making greater idlers than ever of the natives. It is in fact providing them with a new interest to which they devote much of the time that would otherwise be spent less pleasurably and probably less profitably.

It is perhaps on law and organization that the Taro cult has the most significant effect, albeit a rudimentary and indefinite one. The voluntary acceptance of a new ritual, however lax, the observance of taboos, the necessity for probation, are all influences making for law and law-abidingness. More significant still is the elementary hierarchy which we have observed among the Taro men (p. 32). The existence of leaders in one tribe who are recognized by distant votaries of the cult in another tribe stands perhaps for a new idea among the Orokaiva. The absence of any political cohesion among and within the peoples of Papua has been remarked by others. It is conceivable that such a movement as Taro might give the initial impetus to some more or less spontaneous political organization.

The emergence of strong personalities who attain to an eminent position in the cult may give promise of a more advanced kind of chieftainship than the very primitive

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137 edible fruits are rare, there is a very fine red or yellow
262 ball called *Hega* which is plentiful and which annoys the thirsty traveller by its resemblance to an orange. It is in fact, as the natives say, only food for devils.

3. *Garden Products: their Introduction and Distribution*

244 The products of native horticulture in the Northern Division may be roughly classified. The list opposite is fairly complete in the more important items.

In addition to the list there are some garden herbs and plants used as spinach, or flavouring to the cooked taro. The native names of the most important, as far as I know them, are *Ombi*, *Taramu*, and *Nyaditi*. Lastly,
247 there is a list of ornamental plants—croton in countless varieties, striated dracaena, crimson amaranth, and flame-coloured or magenta coxcombs—which add much to the brightness and charm of a village or a sunny garden-clearing, and which have in some cases a magical as well as an ornamental value; and besides these a number of scented plants which a native loves for their own sake and for the seductive fragrance which is meant to make him an irresistible lover.

244 If we select the products which are of real importance to the Orokaiva they will make a much shorter list. They
245 are taro (the staple diet), yams, and sweet potatoes (both of them no more than subsidiary), *ina* and sugar-cane, bananas and plantains, coco-nut and betel palms.

244 The Orokaiva are essentially taro people. The plant is grown universally and in a great number of varieties.[1] It is easily cultivated, nutritious, and, prepared by a native housewife, very appetizing. The cook's habit of
252 spraying condiments out of her mouth over the pot may daunt the inquisitive European who would otherwise be willing to sample her work, but there is no denying

[1] I have the names of seventeen varieties, distinguishable by various properties of leaf, stalk, tuber, &c. There are no doubt many more. Codrington notes the great variety of taro. Of yams, incidentally, he listed no less than eighty varieties in the small island of Mota (Codrington, *Melanesians*, pp. 304, 319).

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	European Name.	*Native Name.*	*Remarks.*
Tuberous	Manioc*	*Maniota*	Very rare among Orokaiva.
	Sweet potato	*Gerois*	
	Taro	*Ba*	
	Yam	*Kai*	
Graminaceous	*Ina*	*Ina*	An *Andropogon*
	Maize *	*'Koni', Komona Kuku-ta-pije*	
	Sugar-cane	*Jou (Dou)*	
Cucurbitaceous	Cucumber	?	Indigenous
	Gourd	*Sigi (Tigi)*	
	Pumpkin*	*Pumpkin, Batana*	
	Water-melon*	—	
Miscellaneous fruits, &c.	Bananas and plantains	*Pije (Bido)*	
	Pineapples*	—	
	Tomatoes*	—	Rare
Narcotics, &c.	Betel pepper	*Hingi (Kingi)*	*Piper betle* [249]
	Tobacco	*Orokaiva, Kaiva Kuku, Soka, &c.*	
Cultivated trees and palms	Areca	*Sa (Da)*	Betel-nut palm
	Coco-nut	*Bu (Mutari)*	
	Lime*	*Siporo*	
	Mandarin*	—	Rare
	Mango*	*Ewa*	Rare
	Orange*	—	Rare
	Papaw*	*'Popo', Bitani*	
Valued trees, palms, &c.	Bark-cloth tree	*Ajimo*	Sometimes planted
	Bread-fruit	*Oga* and *Esuma*	Sometimes planted
	Fig	*Junga*	
	Hombari	*Hombari*	?
	Mango (wild)	*Ewa*	
	Pandanus	*Monga*	Used for fibre
	Pandanus (fruiting)	*Onja*	
	Puga	*Puga*	*Cycas media*
	Okari	*Tauga*	*Terminalia Okari*

* The plants marked with an asterisk are of European introduction.

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252 that a plate of firm morsels, the size of potatoes, impregnated with the juices of savory leaves and set off with a few scraps of fish or dried iguana, presents at least a sufficiently attractive *tout ensemble*.

244 The relative distributions of the taro and the yam are interesting. Whereas among the mountain people of the Hydrographers and the Koiaris of the Central Range the yam is probably the mainstay of existence, its place is taken by the taro among the Orokaiva plainsmen. In the piedmont country of Sangara, Isivita, and Hunjara the yam is grown extensively side by side with the taro, and the same is true among the tribes immediately north of the Hydrographers and Lamington foot-hills. By the time one has gone north as far as the Aiga people of the middle Opi, however, the yam-houses are no longer seen in the villages, and the yam has become a product of minor importance; and it continues so throughout the north of the Division. There is no reason, as far as I know, why the yam should not flourish on the plains, and the distribution presumably is not climatic but cultural.

713 So it might appear from a well-known story of the Orokaiva. In the hills to the southward there was a hole in the rocks, first discovered, according to one version of the legend, by the pecking of birds. Out of this hole, once opened, there issued a number of men bringing with them certain habits and possessions which they have distinctively retained. The first to emerge were the Orokaiva, who brought up the taro besides the other garden products—bananas, sugar-cane, and so forth. After them came the Kaume, or Managalasi, who wore numerous long pigtails, bound with bark. But as their forerunners had appropriated all the taro, they had to be content, for the main support of their existence, with yams.

This is merely the northern version of the legend. On its own ground, namely the southern slopes of the Hydrographers, it is told with greater detail, and they will even show the identical hole, I believe, somewhere on the Bariji river. It is said to be deep like a well, and

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a yam. Now yams are best roasted; if boiled, they must be boiled with care, or they resolve themselves into a watery mash. The Orokaiva like their taro in firm lumps, and perhaps they would be ill disposed towards a new kind of food whose consistency was so little to their taste.

On the whole we may reasonably associate the taro with the Orokaiva, and the yam with the mountain peoples on the south and south-west; the commonness of yams among the southern Orokaiva tribes is no doubt due to a gradual infiltration. Communication between the plainsmen and the mountaineers seems to have been principally in this quarter, viz. with the Biagi, and to some extent the Managalasi. It is not improbable that the sweet potato (*Kerοia*) has come from the same source: although grown quite extensively now over the whole Division, it is not held in very high favour, and, like the yam, is likely to remain wholly subordinate to the taro.

There can be no doubt that several other products have found their way into the Orokaiva plains through this avenue, and that they were established before the advance of the white man into the Division. The principal among them is native tobacco. This is widely distributed among the Orokaiva, though nowhere grown in great quantity. It has evidently preceded the coming of the European by only a generation or two at the most (for the names of agents in its disposal are well remembered), and all informants have been in agreement as to the route it has taken, viz. from the non-Binandele-speaking Isurava or Biagi people in the neighbourhood of Kokoda, down to Oivi and Papangi; thence to the Kumusi and (within living memory) to the Aiga people of the middle Opi; and thence again to the true Binandele of the Mambare and the lower Kumusi.

Tobacco, as an unfamiliar product, is known by a variety of names, such as *Hajojo* and *Tonaki*, from the resemblance of its leaf to those of the *Hajojo* and *Tonaki* trees; *Soka*, a word of doubtful meaning; and *Kuku*, said to be a pre-white-man expression in the north. The

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249 commonest names, however, are *Orokaiva* or *Kaiva*. I will not enter into the dispute as to the original meaning of the mysterious word *Orokaiva*, but if you pluck a tobacco leaf in a village and ask what it is called, three times out of four you will get the answer 'Orokaiva'.[1]

243 Associated with native tobacco is another plant of late
177 introduction, viz. maize or 'corn'. Informants will insist that maize was known, at least in some parts of the plains, before the coming of the white man; and they lay down the same course as that of tobacco for its progress northwards. Nowadays the usual name for maize is *Koni*, a native rendering of 'corn'; but there are at least three other names which are said by some to be earlier than *Koni*; they are *Komobani* and *Tambara* (neither of which I can explain), and the picturesque compound *Kuku-ta-pije*, literally, 'tobacco-banana', which implies a likeness between corn-cob and banana and perhaps a simultaneous introduction of corn and tobacco. As it appears certain that corn was introduced to this country by the white man, we have another instance in which the introduction has outstripped the introducer.[2]

244 Lastly, it was claimed by some that the papaw and the
177 pumpkin had come down from the hill people in the same way. Both these are European introductions, and if the claim be a true one, then we have a somewhat remarkable proof of the rapidity with which an introduced product may spread by contact—provided always that, like corn, it is a welcome addition to the native's *menu*. Of the more important products sugar-cane, sago, and some varieties of plantain are probably indigenous in the true sense of
245 the word. The better kind of areca palm is said to be introduced, but there are wild varieties in the bush. The coco-nut, most domesticated of trees, seems to follow in the train of the human wanderer, thriving and rejoicing, as they say, in the sound of his voice.

773 The legend has it that the coco-nut was first a girl.

[1] This at any rate among Wasida, Aiga, and Binandele people.
[2] Cf. *Papua*, J. H. P. Murray, p. 103.

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ensure their survival. In the Wedau country about Bartle Bay irrigation has become a necessity because the strip of cultivable land between the steep grass hills and the coast is of limited area and subject to a yearly dry spell of some severity. The same necessity is not often felt in the Northern Division, though in the foot-hill country, at any rate, the Wedauan methods could have been adopted with advantage.

The paucity of good land and the steepness of the hills about Bartle Bay—to continue the comparison—have necessitated another improvement, viz. terracing. There are few localities in the Northern Division where the same conditions prevail. Between the mouths of the Mambare and Opi rivers, however, the coastal belt is a mixture of grass-land, swamp, and hills, and here the gardener is often compelled to assail the steepest acclivities—so steep at times that climbing them is hard enough, to say nothing of cultivating them. In this country, as in the rest of the Division, the heavier timber is allowed for the most part to lie where it falls. But here, whether by intent or not, it serves a purpose. For those trees which fall across the slope or diagonally become paths and standing-places for the gardeners, and as detritus falls and builds up against them, they become virtually terraces. It is true they are not regular and level like those of Bartle Bay, and, as far as I have observed, they are prevented from giving way not by driven stakes, but only by the stumps of the felled trees or by other obstacles on the hill-side. However these points may be only refinements, and it is easy enough to imagine that the idea of terracing might originate independently in the way I have suggested.

(*c*) *Planting.* The Orokaiva is no tiller of the soil. He loosens it with a digging-stick in order to plant the taro shoot, and his wife loosens it again when she pulls the taro. Otherwise it is left to look after itself.

Taro is propagated principally by offsets, but also by replanting tops of used tubers. When rain has fallen

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overnight and the ground is tolerably soft, a man and his wife will go out together in the morning, he with his spears and his knife, she with a bagful of taro-tops—the accumulation of several days. The man may carry a digging-stick or he may make one on the spot with a few strokes of his knife. They go to a bare plot in their garden, he takes a handful of taro-tops from his wife, and they begin work. With his right hand he drives the stick into the ground, with a grunt and an exclamation, levering it back and forth to loosen the earth and enlarge the hole: then without stooping he shoots one of the taro-tops with his left hand into its place, as if he were a schoolboy playing eye-drop; if his aim happen to be a bad one, he simply grasps the taro-top between his toes and thrusts it into the hole. With a light touch of his foot he presses it home and plunges his stick into the ground for the next. The earth is not packed tightly round the stem, but left rather loose and open.

The *bere* or offsets of the taro are planted in the same nonchalant manner. The work is done rapidly and effectively, although it is harder than it looks. As a personal trial soon shows, the digging-stick requires no small amount of punch behind it. The taro are planted irregularly, but usually as much as 1 foot 6 inches apart. They begin to thrive immediately, and the gardener has another of his progressive plots under way.

Yams, which propagate by shoots, are kept in the yam-houses until the shoots have made their appearance and are fairly advanced; then they are planted against the tree-stumps, which will stand in lieu of trellises for them. Sugar-cane and *Ina* are planted as cuttings, once more against the tree-stumps for support. Several kinds of garden 'cabbage' are propagated by seeds, as is of course native tobacco. It is a common thing to see a number of tobacco plants in the village itself, where they have sprung from seeds falling through the floors of the houses. With the garden 'cabbages' *Ombi* and *Taramu* a seeding flower will be set up on a stump so that the seeds may fall round about.

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round about. Natives will ask you politely for an orange-pip when oranges come down from Kokoda with the mail, but I have never yet heard of an orange-tree successfully grown by a native.

Sometimes you may meet a man returning from a journey with a bundle of rooted saplings on his shoulder —bread-fruit or *Ajimo*, the bark-cloth tree—which he means to plant in his garden. Near Dobodura I have seen a plantation of young *Ajimo* trees—perhaps 500—about 10 feet high and somewhat densely planted. The native is prone to plant his trees too closely, especially coco-nut and betel palms. The latter may sometimes be seen in soldierly rows, so close together that a big man could scarcely pass between. On the site of a new village an energetic village constable had made his own plantation of coco-nuts, lined, spaced, and each protected by a little fence against the pigs. Everything reflected credit upon his observation of white men's methods except that his coco-nuts were not more than 12 feet apart.

(*d*) *Tending and Protecting.* While the taro are young they are kept fairly clear of weeds, but once they are fully established work grows slack and they are left to fight their own battle. Weeding, like most drudgery, is mainly woman's work. It is done principally by hand or by trade-knife, and the weeds are thrown aside or hung untidily on the tree-stumps. As there is no implement resembling a hoe, the soil loses the advantage of being tilled and weeded at one and the same time.

There are many degrees of tidiness and untidiness in native horticulture, and, as we have observed, the neglect of *kurokuro* grass is the most serious offence. But a weed-grown garden and its owner are objects of contempt. There is a tale (not wholly relevant but not to be spoiled by omitting the irrelevant) of a young bride, wooed by a ne'er-do-well youth and won by his false account of the large and well-kept garden which is to be hers. She consents to accompany him home and become his wife. Nearing his village they pass through broad expanses of

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flourishing taro with hardly a weed to be seen, and he points to this side and that, telling her that the gardens are his. Very well pleased with her prospects the girl goes out with her husband next morning to help him at his work. This time he takes her to his real garden, an overgrown neglected patch. Sadly disillusioned the poor girl says nothing but sits down to her weeding while her husband at a little distance does the same. Presently she pulls up a weed with a sound which causes her husband to think she has broken wind. He bursts into a loud guffaw, and the girl hangs her head in shame, thinking to herself, 'This new husband of mine is a brute as well as a liar.' After a moment's silence, while the man's back is turned, she takes a stone and flings it into the bush, crying excitedly, 'Look, a wallaby!' He notices the disturbance in the brushwood caused by the falling stone, seizes his spear and dashes off in pursuit, while the girl, taking advantage of his preoccupation, dashes off in the opposite direction to her village, where, to point the moral and make a happy ending, she subsequently marries another.

The native realizes that too great a proportion of the plant's vitality may go into its leaves, and sometimes he will trim them. Before planting the offset the young leaves are invariably snipped off except for one or two. So also with the taro-top. The cook holds a large flat piece of oyster shell or coco-nut shell in the palm of her hand, and with a pushing motion neatly severs the taro-top at its base before proceeding to peel the taro. The stalk is trimmed to a length of six or seven inches, and the taro-top put aside for replanting. The edge of this peeling instrument is dangerously sharp in clumsy hands. The cuscus was once an old woman who sat peeling taro while a dance was in progress. But she kept her old eye fixed in admiration upon her son-in-law, the barnyard rooster, who with his splendid feathers made such a figure among the dancers; and thus, while her attention strayed, the taro-peeler slipped, and she became aware

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538 that she had cut her thumb off. At that she said, 'Now I am a cuscus,' and ever since the animal has been remarkable for the queer little member which so resembles a truncated human thumb.

244 794 789 Sometimes dying leaves are snipped off the growing plant. In a ceremony of the new 'Taro cult' a band of excited men were pushing their way through the taro gardens, headed by one or two leaders who continually sprayed the plants with medicine from their mouths, and here and there as they passed snapped off large leaves. The reason for this, as the leaders themselves explained the matter, was that, as with a fully grown taro the outer leaves fall, it would expedite this development to anticipate it, and make the leaves fall now.

244 I do not know of any other kind of trimming or pruning, save sometimes in the interests of tidiness. On the whole garden plants, large and small, are left very much to themselves. Some exception, however, is made in the [249] case of sugar-cane, the long stalks being bound together and supported by poles, lest they fall and so become a prey to rot and rat.

241 136 There seem, however, to be few recognized pests in the ordinary sense of the word; the principal enemies of the native horticulturist are not microbes but animals, bats, and birds. He must be constantly on guard against the bush-pig and minor foes—the flying fox, the rat, the wallaby, and the cockatoo, not to mention his fellow man. Formerly, in a kind of native Paradise where work [173] was at a minimum, the bush-pig was content with bush food—roots and herbs and such-like. But exchanging confidences with the rat, he learnt that the latter's food was taro and succulent sugar-cane. After that he invaded the gardens, and it has been necessary ever since to build a fence.

417 241 The garden fence should properly surround the whole group of clan gardens. It is built in sections, each man being responsible for the part nearest his own garden. But the work is rather laborious, and the gardens are

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bour. Theft is not altogether uncommon and in former times may have led to serious reprisals. An old man tells how he found a woman stealing his taro, and immediately dealt her a blow on the back with his pineapple club, with corrective but happily not fatal results. So also we find tales of ravaged gardens, tale-bearing, accusations, and the indeterminate duels in which the Orokaiva rejoices to find a vent for his anger. As prevention is better than cure, however, the garden is often guarded by some taboo sign—a few wisps of grass laid across the path, a thin tape of bark tied to sticks and encircling the garden, or some coco-nut leaflets knotted about the trunk of the palm. These are nearly always respected, partly through mere law-abidingness, partly because of the veiled threat of sorcery which they imply.

Besides these frail but effective safeguards, the gardener used occasionally to resort to practical measures more after the manner of spring-guns and man-traps. The *oivo* is a miniature pitfall, lined with sharp little spikes, which, I was assured, are sometimes tipped with *inja*, or sorcerer's medicine. Concealed with leaves they were placed in gardens, or more usually on tracks leading into the village, so that any sorcerer who came prowling after dark might make a false step and betray his presence by a yell. Nowadays, I am told, the practice has been abandoned, and the only cases in which I heard of the *oivo*'s actual effectiveness were those in which the wrong man had been caught—perhaps naturally, as a guilty trespasser would lie low and conceal his injuries. A certain well-known character, ex-Corporal Bia, at the Mambare mouth, went, as he says, to inspect his brother's pineapples; but the inspection was cut short, just at the stage, perhaps when the sampling might have begun, by a step into the *oivo*.

(*e*) *Harvesting, Storing, &c.* The taro is planted from time to time, and used as it matures. Almost daily the wife will go out to her garden, do a little weeding, and fill her *eti*, or string bag, with freshly pulled taro. If she

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244 482 be accompanied by her husband they will probably return together about noon, he with his axe, knife, and spears over his shoulders, she, a few paces behind, bending forward under a weight of taro, greens, and firewood, her immensely distended string bag hanging over her back from a band across her sweating forehead, while the counter-balance of a sleeping baby in another string bag may hang before her. A small prick-eared [231] dog trots alongside, and as the larger and more aggressive animal that accompanies the white man comes into view, she will (to avoid the possibility of conflict) contrive in some manner to sink down and gather the extra burden of a dog into her arms.

244 Replanting goes on from time to time, and the successive plots may be marked off by log boundaries (*tani*). The period of greatest activity is perhaps about the beginning of the North-West season, when more abundant rain can be counted on, and when the whole clan may be engaged in planting out the offsets, or *bere*. But there is no seasonable rule, and *bere* may be transplanted into damp localities in the middle of a dry spell. Indeed, one man complained that a term of three months in the district jail had coincided with such a dry spell, and he had actually lost all his offsets for lack of transplanting.

251 [131] The fact that there is never real famine and that scarcity is a rare thing, brings about an attitude of mind which we might call improvidence. Yams are stored where they are grown; so also are *Tauga* nuts and *Puga*. But the two former are not common except in the south of the Division. Beyond these, and of course the coconut, the native puts by no vegetable food. When a feast

251 754 is preparing, the taro will be gathered in great quantities and stacked on platforms. Some is eaten at the feast, some distributed with a great display of cordiality to the guests, who take it home. There is no method of preserving taro, and sometimes, when a feast is for any reason delayed, a great deal of food may deteriorate and become inedible.

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A TARO MAN AT WORK IN THE GARDEN

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